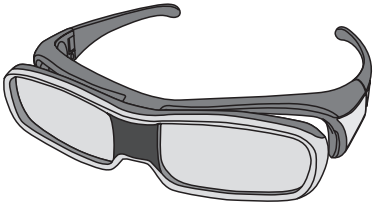
Panasonic

Operating Instructions
3D Eyewear

Model No. **TY-EW3D10E**



This product cannot and must not be used as sunglasses.

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This 3D Eyewear can be used only for Panasonic Plasma HDTVs supporting 3D.
For the latest information on applicable models, visit our web site.
http://panasonic.net/

This product can be worn over vision correction glasses.

Thank you for purchasing a Panasonic product.

- Before using this product, be sure to read “Safety Precautions” and “Using Precautions” (☞ pages 2 - 5).
- Before operating this product, please read the instructions carefully, and save this manual for future use.

TQZJ232

ENGLISH

Safety Precautions

Warning

Small Parts

- This product contains small parts (battery and specialised band and nose pad, etc.) and must be kept out of reach of small children to avoid accidental ingestion.

Disassembly

- Do not disassemble or modify the 3D Eyewear.

About Lithium Battery

- Batteries must not be exposed to excessive heat such as sunshine, fire or the like.

Caution

About 3D Eyewear

- Do not drop, exert pressure on, or step on the 3D Eyewear.
- Always store the 3D Eyewear in the case provided when not in use.
- Be careful of the tips of the frame when putting on the 3D Eyewear.
- Be careful not to trap a finger in the hinge section of the 3D Eyewear.
- Pay special attention when children are using this product.

Viewing 3D Content

- Do not use the 3D Eyewear if you have a history of over-sensitivity to light, heart problems, or have any other existing medical conditions.
- Stop using the 3D Eyewear immediately if you feel tired, discomfort, or any other uncomfortable sensation.
- Take an appropriate break after viewing a 3D movie.
- Take a break of between 30 - 60 minutes after viewing 3D content on interactive devices such as 3D games or computers.
- Be careful not to strike the television screen or other people unintentionally. When using the 3D Eyewear the distance between the user and screen can be misjudged.
- The 3D Eyewear must only be worn when viewing 3D content.
- Do not tilt your head and/or the 3D Eyewear while viewing 3D image. Keep your eyes and the 3D Eyewear are on a horizontal level to the television.
- If you suffer from any eyesight problems (short/far-sighted, astigmatism, eyesight differences in left and right), please ensure to correct your vision before using the 3D Eyewear.
- Stop using the 3D Eyewear if you can clearly see double images when viewing 3D content.
- Do not use the 3D Eyewear at a distance less than the recommended distance.
  The recommended viewing distance is 3 times of image height.

For a 50-inch television	about 1,9 m
For a 54-inch television	about 2,0 m
For a 58-inch television	about 2,3 m
For a 65-inch television	about 2,4 m

- When the top and bottom area of the screen is blackened, such as movies, view the screen at a distance 3 times of the height of the actual image. (That makes the distance closer than above recommended figure.)

3D Eyewear Use

- 3D Eyewear should not be used by children younger than 5 - 6 years old, as a guideline.
- All children must be fully supervised by parents or guardians who must ensure their safety and health throughout the using 3D Eyewear.
- Before using the 3D Eyewear, ensure no breakable objects surrounding the user to avoid any accidental damage or injury.
- Remove the 3D Eyewear before moving around to avoid falling or accidental injury.
- Use the 3D Eyewear only for the intended purpose and nothing else.
- Do not use if the 3D Eyewear is physically damaged.
- Stop using the 3D Eyewear immediately if a malfunction or fault occurs.
- Stop using the 3D Eyewear immediately if you experience any redness, pain, or skin irritation around the nose or temples.
- In rare cases, the materials used in the 3D Eyewear may cause an allergic reaction.

About Lithium Battery

- Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.

Using Precautions

- Do not drop or bend the 3D Eyewear.
- Do not apply pressure to or scratch the surface of the liquid crystal shutter of the 3D Eyewear.
- Do not soil the infra-red receiver section or attach stickers etc. to it.
- Do not use devices (such as mobile phones or personal transceivers) that emit strong electromagnetic waves near the 3D Eyewear as this may cause the 3D Eyewear to malfunction.
- Do not use 3D Eyewear outside the specified usage temperature range (☞ page 11).
- If the room is lit by fluorescent lights (50 Hz) and light appears to flicker when using the 3D Eyewear, switch off the fluorescent light.
- 3D content will not be correctly visible if the 3D Eyewear is worn upside down or back-to-front.
- Do not wear the 3D Eyewear when watching anything other than 3D images. Other kinds of displays (such as computer screens, digital clocks, or calculators etc.) may be difficult to see while wearing the 3D Eyewear.

Identifying Controls

■ Battery case

Fitting the battery (☞ page 9)
When using for the first time, remove the insulating sheet.
(☞ page 7)

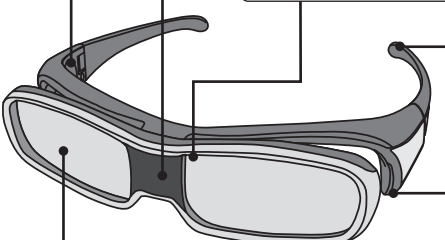
■ Infra-red receiver

Receives infra-red signals from the television.
The liquid crystal shutter open/close timing is controlled by receiving infra-red signals from the television, which provide 3D expression of the images.
If the eyewear stops receiving infra-red signal from the television, the power automatically switches off after 5 minutes.

■ Nose pad installation section

(3D Eyewear inner section)
(☞ page 7)

Specialised band can be attached here. (☞ page 7)

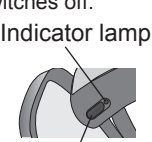


■ Liquid Crystal Shutter (lens)

Controls the images for 3D viewing. The left and right liquid crystal shutters are alternately opened and closed in time with the left side and right side images that are alternately displayed on the television to achieve the 3D effect.

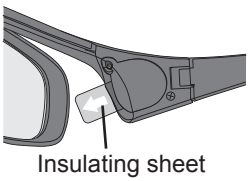
■ Power button (bottom side of 3D Eyewear)

Switches on the 3D Eyewear power.
Press and hold the power button for approximately 1 second to switch the power on, and the indicator lamp lights for approximately 2 seconds.
(When the battery is low, the indicator lamp flashes 5 times on switching on the power.)
To switch the power off, press and hold the power button for approximately 1 second. The indicator lamp flashes 3 times, then the power switches off.



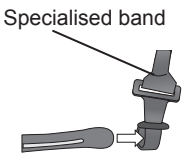
Using for the first time

■ Remove the insulating sheet



■ Attach the specialised band

If the 3D Eyewear slips out of place, use the specialised band included to hold it in place.

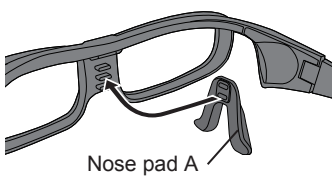


Attach the band to the left and right tips of the frame, and adjust the length.

■ Attach the nose pad

If required, use the included nose pad.

- Nose pad A adjusts the attachment position of the 3D Eyewear between 2 vertical levels. (Slot 2 of the 3 protrusions on the 3D Eyewear into the holes on nose pad A.)
- When using nose pad B, ensure that all 3 protrusions on the 3D Eyewear are inserted into the 3 holes on nose pad B.
- Make sure that the nose pad is inserted all the way and securely attached.



Accessories

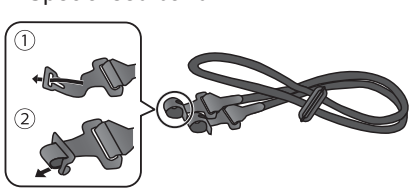
- < > indicates the quantity.

■ 3D Eyewear case·····<1>

■ Nose pad A/B·····<1>

- Select the nose pad that suit you from A and B.
- It is recommended to wear the 3D glasses over correction glasses without the nose pad.

■ Specialised band·····<1>



- When the end of the specialised band is straightened, form a loop at the end of the band, and fix the twisted part.

Using the 3D Eyewear

■ Using the television menu controls, set so that 3D images are shown.

1. (When 3D image signals are being received) press the MENU button on the television remote control.
2. Select “Setup”, and press the OK button.
3. Select “3D settings”, and press the OK button.
4. Select “3D Picture Display”, and use ◀ ▶ to select “3D” or “2D”.

- The procedure above is only an example. For details, see the television operating instructions.

■ Wearing the 3D Eyewear

1. Press and hold the power button on the 3D Eyewear for approximately 1 second. (The indicator lamp lights for approximately 2 seconds.)
2. Put on the 3D Eyewear.

If the 3D Eyewear slips out of place, hold it in place using the specialised band, and adjust the length of the band. (☞ page 7)

If the 3D images are not displayed correctly, adjust the 3D image-related settings. For details, see the television operating instructions.

* The perceived three dimensional effects of the 3D Eyewear differ from person to person.

■ After Use

Press and hold the power button on the 3D Eyewear for approximately 1 second. (The indicator lamp on the 3D Eyewear flashes 3 times, then the power switches off.) After using the 3D Eyewear, store it in the case provided.

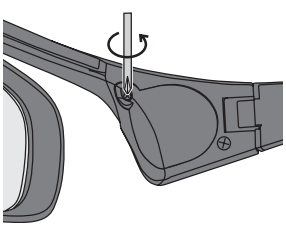
Storage and Cleaning

- Clean using a soft, dry cloth.
  Wiping the 3D Eyewear with a soft cloth that is covered in dust or dirt may scratch the eyewear. Shake off any dust from the cloth before use.
  Do not use benzene, thinner, or wax on the 3D Eyewear, as doing so may cause the paint to peel off.
- Do not dunk the 3D Eyewear in liquid such as water when cleaning.
- Avoid storing the 3D Eyewear in hot or highly humid locations.

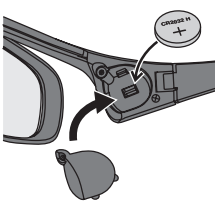
Replacing the batteries

When the battery is low, the indicator lamp flashes 5 times on switching on the power. (Early battery replacement is recommended.)

1. Loosen the screw and remove the cover using the screwdriver (included with the television).



2. Replace the batteries, and then replace the cover.



- Always tighten the screw to hold the battery case cover in place.

NOTE:

- Use the specified type of battery (coin-shaped lithium battery CR2032).
- Do not insert the battery with the polarity (plus ⊕ and minus ⊖) backwards.
- Dispose of the old batteries as non-burnable rubbish, or in line with the waste disposal regulations in your local area.

Troubleshooting/Q&A

Images are not 3D.	● **Are the image settings switched to 3D images?** Some 3D image signals are not automatically recognised as 3D images. Set “3D Picture Display” to “3D”. For details, see the television operating instructions. ● **Is there a sticker or other such item blocking the infra-red reception section on the 3D Eyewear?** If the eyewear stops receiving infra-red signal from the television, the power automatically switches off after 5 minutes. Check that there are no objects blocking the path between the television and 3D Eyewear. ● **Individual differences may occur in which the 3D images are difficult to see, or cannot be seen, especially in users that have a different level of eyesight between the left and right eyes.** Take the necessary steps (wearing glasses etc.) to correct your eyesight before use.
The power of the 3D Eyewear turns off by itself.	● **Are there any objects between the eyewear and television?** ● **Is there a sticker or other such item blocking the infra-red reception section on the 3D Eyewear?** If the eyewear stops receiving infra-red signal from the television, the power automatically switches off after 5 minutes. Check that there are no objects blocking the path between the television and 3D Eyewear.
There is something wrong with the 3D images.	● **Are the left and right sides of the 3D image reversed?** Switch the left and right sides of the 3D image. For details, see the television operating instructions.
The indicator lamp does not light when switching on the power.	● **The battery is too low to operate the 3D Eyewear.** The indicator lamp does not light when switching on the power by pressing and hold the power button for 1 second; that indicates the battery is completely flat. Replace the battery with new one.

Specifications

Lens type	Liquid Crystal Shutter
Batteries (duration)	Coin-shaped lithium battery CR2032 (approx. 75 hours in continuous use)
Dimensions	Width: 177 mm Height: 46 mm Overall length: 174 mm
Power supply	DC 3 V
Materials	Main body: Resin Lens section: Liquid crystal glass
Mass (including batteries)	Approx. 63 g
Viewing range*[1]	Transmitter for 3D Eyewear Within 3,2 m from front surface (Within ± 35° horizontal, ± 20° vertical)
Usage temperature range	0 °C - 40 °C (32°F - 104°F)

*[1] Viewing range

- The location of the 3D Eyewear transmitter differs depending on the model of television.
- There are differences in the viewing range of the 3D Eyewear among individuals.
- The 3D Eyewear may not operate correctly at the outside of the viewing range.

Environment care information for users in China

This symbol is only valid in China.

Information on Disposal for Users of Waste Electrical & Electronic Equipment (private households)

This symbol on the products and/or accompanying documents means that used electrical and electronic products should not be mixed with general household waste.
Please dispose of this item only in designated national waste electronic collection schemes, and not in the ordinary dust bin.

For business users in the European Union

If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

Information on Disposal in other Countries outside the European Union

This symbol is only valid in the European Union.
If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.

Pursuant to the directive 2004/108/EC, article 9(2)
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